REMARKS

This is in response to the *Final* Office Action of February 22, 2008, where the Examiner has rejected claims 1-45. Reconsideration and allowance of outstanding claims 1-45 in view of the following remarks are requested.

A. Rejection of Claims 1-10, 12-20, 22-26, 28-32 and 34-45 under 35 USC §102(b)

The Examiner has rejected claims 1-10, 12-20, 22-26, 28-32 and 34-45, under 35 USC §102(b), as being anticipated by Kroon (USPN 5,664,055) ("Kroon").

It is respectfully submitted that the Office Action states that "Applicant's arguments with respect to claims 1-45 have been considered but are moot in view of the new ground(s) of rejection." However, the Office Action does not rely on any new prior art reference, and still rejects 1-10, 12-20, 22-26, 28-32 and 34-45, based on Kroon. Applicant respectfully submits that, for example, it is not clear to applicant how Kroon shows the limitations of claim 1, as amended, without the Examiner "response to arguments" explaining the Examiner's reasons, so that the prosecution of the present application can move forward.

It is respectfully submitted that the Office Action merely cites "(index; column 1, lines 22-26, col. 3, lines 17-25, and column 30, lines 55-65)," next to the limitations "creating a plurality of voicing indexes by said encoder, wherein each of said plurality of voicing indexes is indicative of one of a plurality of classes of said input speech signal, wherein each of said plurality of classes of said input speech signal represents a different degree of periodicity of said input speech signal," without offering any explanation as to how these limitations are disclosed

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in Kroon. As there is no "response to applicant's arguments," to the best of applicant's inference

from the cited portions of Kroon by the Examiner, applicant respectfully submits that Kroon does

not disclose, teach or suggest the above-cited limitations of claim 1.

It is respectfully submitted that the "index" referenced at column 1, lines 43-64 of Kroon

is simply an index to the fixed codebook. Therefore, claim 1, as amended, is patentably

distinguishable over the "index" referenced in Kroon. In fact, the disclosure at col. 30, lines 55-

65 of Kroon, which is relied upon by the Examiner clearly shows that the encoder in Kroon does

not "create a plurality of voicing indexes by said encoder, wherein each of said plurality of

voicing indexes is indicative of one of a plurality of classes of said input speech signal, wherein

each of said plurality of classes of said input speech signal represents a different degree of

periodicity of said input speech signal." At col. 30, lines 55-65, Kroon discusses the

concealment of frame erasures and parity errors, and states that "If the last correctly received

frame was classified as periodic, the current frame is considered to be periodic as well."

However, contrary to the Examiner's conclusion that this statement indicates that the received

frame from the encoder includes a "classification" to show that it is periodic; col. 30, lines 1-18

of Kroon, as quoted below, clearly shows that the classification is determined at the decoder. It

goes without saying that if the received frame from the encoder, in Kroon, did include a

classification index, as alleged by the Examiner, there would be no need for the decoder of Kroon

to perform classification, as described at col. 30, lines 1-18:

> The concealment strategy has to reconstruct the current frame, based on
> previously received information. The method used replaces the missing
> excitation signal with one of similar characteristics, while gradually
> decaying its energy. This is done by using a voicing classifier based on the
> long-term prediction gain, which is computed as part of the long-term
> postfilter analysis. The pitch postfilter (see Subsection II.4.2.1) finds the

long-term predictor for which the prediction gain is more than 3 dB. This is done by setting a threshold of 0.5 on the normalized correlation R'(k) (Eq. (81)). <u>For the error concealment process, these frames will be classified as periodic. Otherwise the frame is declared nonperiodic.</u> An erased frame inherits its class from the preceding (reconstructed) speech frame. <u>Note that the voicing classification is continuously updated based on this reconstructed speech signal.</u> Hence, for many consecutive erased frames the classification might change. Typically, this only happens if the original classification was periodic. (emphasis added.)

The Examiner should note that Section 4 of Kroon describes "Functional Description of the Decoder," and Section 4.2.1 describes "Pitch Posfilter" for the decoder of Kroon. Therefore, it is respectfully submitted that the decoder of Kroon classifies the speech signal, and the disclosure at col. 30, 55-65, which has been relied upon by the Examiner to reject claim 1, as amended, in fact, teaches away from the invention of claim 1 by showing that the classification is not based on a classification index received from the encoder.

In addition, applicant respectfully submits that Kroon fails to disclose claim 2 of the present application, which recites "classes of said input speech signal include a background noise class, an unvoiced class, a first voiced class, a second voiced class, wherein said first voiced class has a lower degree of periodicity than said second voiced class." In rejecting claim 2, the Office Action again relies on the disclosure at col. 30, 55-65, in Kroon; however, as explained above, this portion of Kroon clearly shows that the decoder performs the classification, and the error concealment section of Kroon does not use a classification index from the encoder, but the error concealment section of Kroon uses the classification information derived in Subsection II.4.2.1 of the decoder in Kroon.

Accordingly, for the reasons stated above, it is respectfully submitted that claim 1, as amended, is patentable over Kroon. In addition, independent claims 12, 22 and 28 include

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limitations similar to those of claim 1, as amended, and should be allowed for the same reasons stated above. Further, claims 2-10, 13-20, 23-26, 29-32 and 34-45 depend from claims 1, 12, 22 and 28, respectively, and should be allowed at least for the reasons stated above.

B.   Rejection of Claims 11, 21, 27 and 33 under 35 USC §103(a)
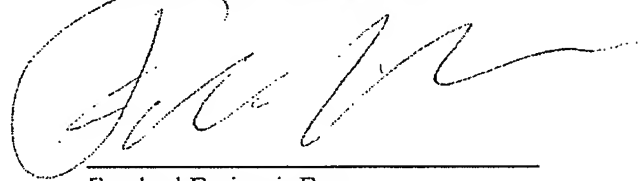
The Examiner has rejected claims 11, 21, 27 and 33, under 35 USC §103(a), as being unpatentable over Kroon in view of Morii, et al. (PGPUB 2006/0206317) ("Morii").

Applicant respectfully submits that claims 11, 21, 27 and 33 depend from claims 1, 12, 22 and 28, respectively, and should be allowed at least for the reasons stated above.

C.   Conclusion

Based on the foregoing reasons, an early Notice of Allowance directed to all claims 1-45 pending in the present application is respectfully requested.

Respectfully Submitted,
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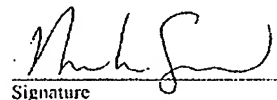| CERTIFICATE OF FACSIMILE TRANSMISSION |
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